LANL Town Hall FY12 Office of Science Early Career Research Grant Solicitation

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Info, including these slides at

http://science.lanl.gov/

When in doubt, read the call:

http://science.energy.gov/early-career

http://science.doe.gov/grants/pdf/LAB_11-572.pdf

Past: What (we think) we learned last year(s)

Present: Deadlines and process between now and 11:59 pm 9/1/11

Future: Making this a sustainable and ongoing process

Your questions/concerns

This is really competitive:

FY10: We won 5 of 69, of which 22 were Lab, of ~1750

"Hot topics" seemed to be picked preferentially, as well as known priorities
-ask your local SC PM for advice

FY11: We won 0 of 67 of which 22 were Lab, of ~1150 full proposals > 90% of preproposals were encouraged to full (and declinations were for 'fit' not quality) "portfolio management" an emerging topic/issue active discussions with SC re: "anomalous reviews" -ask your local SC PM for advice

FY12: \$10M available for Labs (\rightarrow ~20 slots possible)

SC did a major website overhaul since last year. So, all links are different

SC info, including a great FAQ site, at http://science.energy.gov/early-career -PLEASE ask locally first (e.g., eligibility requirements)

Key Requirements

- -Ph.D. 2001 or later
- -single investigator scope (~0.75 FTE): "a minimum of 50% and up to 100%"
- -minimum lab budget \$500k/yr (and maximum budget \$500k/yr)

Competition is by SC AD (i.e., BES doesn't compete with BER for slots; this is already done; and anecdotal info suggests ~ 2-3/ AD)

Each SC AD has specific guidance on what they want (and do not want) to fund

Mandatory Preproposals due Thursday, September 1, 2011 @ 11:59 pm (you submit) https://EarlyCareerPreapp.science.doe.gov

Preproposal feedback: encourage or discourage (binding) by 10/3/11

If encouraged, Proposals are due 11/29 through SC's official submission system, including DIR endorsement ("I" submit)

Each SC AD has specific guidance on what they want (and do not want) to fund

BER EXCLUSIONS: Proposals for BER research should <u>specifically</u> identify which of the four topics listed above, (a) Microbial Systems Biology Design for Bioenergy Production, (b) Arctic

Terrestrial Ecosystem Science, (c) Subsurface Biogeochemistry, (4) Uncertainty Characterization for Integrated Earth System Modeling, is the focus of the proposed research <u>and</u> how the proposed research will address the stated aims. Proposals that address other BER-related topics or that do not make specific reference to the stated aims of these four topics will not be accepted.

One subprogram in BES-materials

advantage of more powerful parallel computational platforms and new experimental tools. Highstrain rate deformation **will not** be explored in this program at this time.

ASCR

For the purposes of the Early Career Research Program, proposed research must be in either Applied Mathematics or Computer Science and be responsive to their respectively specified topic areas.

. . .

arising in computational simulations at scale. Furthermore, proposals that are limited to a specific scientific discipline, or the development and implementation of existing numerical methods, are out of scope for this solicitation.

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NP

Under this Program Announcement, NP does not support investigations in nuclear reactor studies or nuclear reactor modeling.

HEP: The 3 Frontiers (Energy, Intensity, Cosmic)

Together, these three interrelated and complementary discovery frontiers offer the opportunity to answer some of the most basic questions about the world around us. All proposals should address specific research goals in one or more of these frontiers (as in the examples given below), and explain how the proposed research or technology development supports the broad scientific objectives and mission of the HEP program.

New proposals should generally focus on: (1) Experimental High Energy Physics Research; or (2) Theoretical High Energy Physics Research; or (3) advanced technology R&D for the next generation of particle accelerators, detectors, and computing technologies for the future advancement of high-energy physics and other sciences, supporting world-leading research in the physics of particle beams and fundamental advances in particle detection.

FES

priority will be given to plasma theory and modeling to provide the foundations for integrated simulation of fusion systems, experimental research advancing the magnetic fusion energy science; high-energy-density plasma science, general plasma processes and low temperature plasma science, and development of materials and technologies that will allow fusion facilities to enter new regimes of plasma science.

Review Criteria (directly from

http://science.doe.gov/grants/pdf/LAB_11-572.pdf)

Proposals will be subjected to scientific merit review (peer review) and will be evaluated against the following evaluation criteria which are listed in descending order of importance:

- 1. Scientific and/or technical merit of the project.
- 2. Appropriateness of the proposed method or approach.
- 3. Competency of the personnel and adequacy of proposed resources.
- 4. Reasonableness and appropriateness of the proposed budget.

The following announcement-specific evaluation criteria will also be used during the scientific merit review (peer review):

- 5. Relevance to the mission of the specific program (e.g., ASCR, BER, BES, FES, HEP, or NP) to which the proposal is submitted.
- 6. Potential for leadership within the scientific community.

Miscellaneous thoughts/suggestions/advice

http://science.doe.gov/grants/pdf/LAB_11-572.pdf

The preproposal attachment should include, at the top of the first page, the following information:

Title of Preproposal
Principal Investigator Name, Job Title
National Laboratory
PI Phone Number, PI Email Address
Year Doctorate Awarded: XXXX
Program Announcement Number: LAB 11-572

This information should be followed by a clear and concise description of the objectives and technical approach of the proposed research. The preproposal may not exceed two pages, with a minimum text font size of 11 point and margins no smaller than one inch on all sides. No biographical data need be included. Figures and references, if included, must fit within the two-page limit.

There is a "three strikes" rule:

An individual PI can submit to this call only three times in their period of eligibility (first 10 years since Ph.D.)

Submitting a preproposal does NOT count as a strike; submitting a full proposal does

There will be tons of preproposals:

Follow the call guidance closely, including format, topical area, relevant

Although you don't have to work with us at the preproposal stage, PLEASE let us help you:

We can help you get answers to your questions without creating 'confusion' with SC

We can help you identify the right sub-program element for your submission

We can help you identify relevant grand challenges/reports to highlight in your submission

We can help you navigate the submission system and ensure your documents are received by SC

If encouraged, you have to work with us for formal submission and for DIR letter of support

Please sign in on the attendance sheet and please send us a draft of your preproposal no later than COB 8/26 for feedback, and no later than 9/1 for tracking

Making this a sustainable and ongoing program in the future

Far more LANL PIs are qualified and credibly capable of winning than this year's program will allow.

We are committed to working with all of you over the next several years as key elements of our Office of Science pipeline, both for this call and for broader SC opportunities.

LANL SC Program Managers

John Sarrao (ASCR, BER, BES)

Don Rej (FES, HEP, NP)

Advanced Scientific Computing

Applied Mathematics: Pieter Swart, T-5

Computer Science: Pat McCormick, CCS-1

Scientific Discovery through Advanced Computation: Beth Wingate, CCS-2

Basic Energy Sciences

Materials Sciences & Engineering: John Sarra, SPO-SC

User Facilities: Alan Hurd, Lujan Center

David Morris, MPA-CINT

Chemical Science, Geosciences, & Biosciences: David Thorn, C-IIAC

Biological & Environmental Research

Biological Systems Science: Cheryl Kuske, B-8

Joint Genome Institute: John C. Detter, B-6

Climate and Environmental Sciences: James Bossert, EES-DO

Climate Science (Terrestrial): Cathy Wilson, EES-14

Climate Science (Observation): Manvendra Dubey, EES-14

Climate Science (Modeling): Phil Jones, T-3

Fusion Energy

Research: Glen Wurden, P-24

High Energy Physics

Rajan Gupta, T-8

Advanced Technology R&D: Bruce Carlsten, ISR-6

Nuclear Physics

Scott Wilburn, P-25

Isotope Production and Applications: Kevin John, SPO-SC

